5. NEBRASKA BOILER (B-5)

Summary Description

The following is a narrative description of the B-5 Nebraska boiler regulated in this Tier I operating permit. This description is for informational purposes only.

The "B-5" gas-fired boiler generates steam for the production of phosphoric acid. The B-5 boiler must meet the following specifications, or be of equivalent design subject to Department approval:

Manufacturer:	Nebraska Boiler Company
Model Number:	NSX-G-107-ECON
Rated Heat Input:	213.8 MMBtu/hr
Steam Capacity:	175,000 lb/hr
Fuel:	Natural gas

Table 5.1 describes the devices used to control emissions from the Nebraska boiler.

Table 5.1 EMISSIONS UNITS AND EMISSIONS CONTROL DEVICES

Source Code	Emission Unit(s) / Process(es)	Emission Control Device
S-Nb-1	Nebraska boiler (B-5)	Low NO_x package boiler

Table 5.2 contains only a summary of the requirements that apply to the B-5 Nebraska boiler. Specific permit requirements are listed below Table 5.2.

Table 5.2 APPLICABLE REQUIREMENTS SUMMARY

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Operating, Monitoring & Recordkeeping Requirements
5.1	Nitrogen oxide emissions	0.20 lb/MMBtu 16.84 lb/hr 70.71 T/yr	40 CFR 60.44b [1] PTC No. 029-00003, Permit Condition 2.2, 7/7/95	5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10, 5.11, 5.13, 5.14, 5.15, 5.16, 5.17, 5.18, 5.19, 5.20, 5.21, 5.22
5.2	Particulate matter emissions PM_{10} emissions SO_2 emissions CO emissions VOC emissions	1.05 lb/hr, 4.42 T/yr 1.05 lb/hr, 4.42 T/yr 0.13 lb/hr, 0.53 T/yr 8.42 lb/hr, 35.4 T/yr 0.36 lb/hr, 1.50 T/yr	PTC No. 029-00003, Permit Condition 2.1, 7/7/95	5.5, 5.6, 5.12
5.3	Particulate matter	0.015 gr/dscf corrected to 3% oxygen	IDAPA 58.01.01.677	5.5

[1] If any requirement in this permit conflicts with any requirement contained in 40 CFR 60 the requirement in 40 CFR 60 shall control.

Permit Limits / Standard Summary

5.1 The NO_x emissions from the B-5 boiler stack shall not exceed 0.20 lb/MMBtu in accordance with Permit Condition 5.1.1 and the NO_x emission limits in Table 5.3.

5.1.1 On and after the date the initial performance test is completed, or is required to be completed under 40 CFR 60.8 (whichever comes first), the permittee shall not cause any gases that contain nitrogen oxides (expressed as NO_2) to be discharged into the atmosphere in excess of 0.10 pounds per million Btu (0.10 lb/MMBtu) heat input to the boiler at a low heat release rate (70,000 Btu/hr-ft³ or less), or in excess of 0.20 pounds per million Btu (0.20 lb/MMBtu) heat input to the boiler at a high heat release rate (greater than 70,000 Btu/hr-ft³).

[40 CFR 60.44b(a); PTC No. 029-00003, Section 2.2, 8/14/96]

5.1.2 Compliance with the emission limit in Permit Condition 5.1.1 is determined on a 30-day rolling average basis.

[40 CFR 60.44b(i)]

5.2 The PM, PM_{10}, SO_2, CO and VOC emissions from the B-5 boiler exhaust stack shall not exceed any corresponding emission limit listed in Table 5.3.

[PTC No. 029-00003, Section 2.1, 7/7/95]

Table 5.3 EMISSION LIMITS

Source Description	PM		PM_{10}		SO_2		NO_x		VOC		CO	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
B-5 Boiler	1.05	4.42	1.05	4.42	0.13	0.53	16.84	70.71	0.36	1.50	8.42	35.4

5.3 The PM emissions shall not exceed the grain-loading emission limits of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for natural gas.

[IDAPA 58.01.01.677, 5/1/94]

Operating Requirements

5.4 The boiler shall be equipped with a COEN low-NO_x burner, or a Department-approved equivalent for the control of NO_x emissions.

[PTC No. 029-00003, Section 1.2, 8/14/96]

5.5 The B-5 boiler shall only use natural gas as fuel.

[PTC No. 029-00003, Section 3.3, 7/7/95]

5.6 The B-5 boiler shall not burn more than 1,768,000,000 scf of natural gas fuel per year.

[PTC No. 029-00003, Section 3.4, 7/7/95]

Monitoring & Recordkeeping Requirements

5.7 NO_x Performance Test

Compliance with the NO_x emission standards under Permit Condition 5.1 (40 CFR 60.44b) of this permit shall be determined through performance testing under Permit Condition 5.8 or 5.9 (40 CFR 60.46b(e) or (g)). This performance test, and any subsequent performance tests conducted to demonstrate compliance with this permit, shall be performed in accordance with IDAPA 58.01.01.157.

[40 CFR 60.46b(c)]

To determine compliance with the emission limits for nitrogen oxides required under 40 CFR 60.44b, the owner or operator of an affected facility shall conduct the performance test as required under 40 CFR 60.8 using the continuous system for monitoring nitrogen oxides under Permit Condition 5.10 (40 CFR 60.48(b)).

1) In accordance with 40 CFR 60.46b(e)(4), following the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8 of 40 CFR 60, whichever date comes first, the owner or operator of an affected facility which has a heat input capacity of 73 MW (250 MMBtu/hr) or less and which combusts natural gas, distillate oil, or residual oil having a nitrogen content of 0.30 weight percent or less shall upon request determine compliance with the nitrogen oxides standards under 40 CFR 60.44b through the use of a 30-day performance test. During periods when performance tests are not requested, nitrogen oxides emissions data collected pursuant to 40 CFR 60.48b(g)(1) or 40 CFR 60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the nitrogen oxides emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly nitrogen oxides emission data for the preceding 30 steam-generating unit operating days.

[40 CFR 60.46b(e)]

5.9 The owner or operator of an affected facility described in 40 CFR 60.44b(j) or 40 CFR 60.44b(k) shall demonstrate the maximum heat input capacity of the steam-generating unit by operating the facility at maximum capacity for 24 hours. The owner or operator of an affected facility shall determine the maximum heat input capacity using the heat loss method described in Sections 5 and 7.3 of the American Society for Mechanical Engineers (ASME) Power Test Codes 4.1 (see IBR 40 CFR 60.17(h)). This demonstration of maximum heat input capacity shall be made during the initial performance test for affected facilities that meet the criteria of 40 CFR 60.44b(j). It shall be made within 60 days after achieving the maximum production rate at which the affected facility will be operated, but no later than 180 days after initial start-up of each facility, for affected facilities meeting the criteria of 40 CFR 60.44b(k). Subsequent demonstrations may be required by the Administrator at any other time. If this demonstration indicates that the maximum heat input capacity of the affected facility is less than that stated by the manufacturer of the affected facility, the maximum heat input capacity determined during this demonstration shall be used to determine the capacity utilization rate for the affected facility. Otherwise, the maximum heat input capacity provided by the manufacturer is used.

[40 CFR 60.46b(g)]

5.10 The owner or operator of an affected facility that has a heat input capacity of 73 MW (250 MMBtu/hr) or less, and which has an annual capacity factor for residual oil having a nitrogen content of 0.30 weight percent or less, natural gas, distillate oil, or any mixture of these fuels, greater than 10% (0.10) shall:

(1) Comply with the provisions of 40 CFR 60.48b(b) through 40 CFR 60.48b(f), or

(2) Monitor steam-generating unit operating conditions and predict nitrogen oxides emission rates as specified in a plan submitted pursuant to Permit Condition 5.15.2 (40 CFR 60.49b(c)).

[40 CFR 60.48b(g)]

5.11 The permittee shall monitor and record the following data as specified in 40 CFR 60.49b(g):

5.11.1 Calendar date.

5.11.2 The average hourly NO_x emission rates in lb/MMBtu and lb/hr.

5.11.3 The 30-day average NO_x emission rates calculated at the end of each operating day from measured or predicted hourly NO_x emission rates for the preceding 30 operating days.

5.11.4 Identification of boiler operating days when the average 30-day NO_x emission rates exceed the standard, with an explanation of the cause of the exceedance and the corrective action taken to remedy the cause of the exceedance.

5.11.5 Identification of the boiler operating days for which NO_x data have not been obtained, including the reasons for not obtaining sufficient data and a description of the correction actions taken.

5.11.6 A list of the times when data were excluded from the 30-day NO_x emission average calculations because of a unit start-up, shut-down, malfunction, or other reasons and the reasons for excluding data.

5.11.7 Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.

5.11.8 Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.

5.11.9 Description of any modifications to the continuous monitoring system which could affect the ability of the continuous monitoring system to comply with Performance Specifications 2 or 3.

5.11.10 Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1.

[40 CFR 60.49b(g); PTC No. 029-00003, Section 4.4, 7/7/95]

5.12 The permittee shall monitor and record the cumulative volume of natural gas fuel consumption on a monthly basis and per each consecutive 12-month period.

[PTC No. 029-00003, Section 4.5, 7/7/95; IDAPA 58.01.01.322.06]

5.13 Performance Tests

5.13.1 Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

[40 CFR 60.8(a)]

5.13.2 Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator:

(1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology,

(2) approves the use of an equivalent method,

(3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance,

(4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or

(5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Clean Air Act.

[40 CFR 60.8(b)]

5.13.3 Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 CFR 60.8(c)]

5.13.4 The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least seven days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.

[40 CFR 60.8(d)]

5.13.5 The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

(2) Safe sampling platform(s).

(3) Safe access to sampling platform(s).

(4) Utilities for sampling and testing equipment.

[40 CFR 60.8(e)]

5.13.6 Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

[40 CFR 60.8(f)]

5.14 Compliance with Standards

At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR 60.11(d)]

5.15 For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR 60, nothing in 40 CFR 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[40 CFR 60.11(g)]

5.16 Circumvention

No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12]

5.17 40 CFR 60, Subpart A, Monitoring Requirements

For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under Appendix B to 40 CFR 60, and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F to 40 CFR 60, unless specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

[40 CFR 60.13(a)]

5.17.1 All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under 40 CFR 60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.

[40 CFR 60.13(b)]

5.17.2 Owners and operators of a CEMS installed in accordance with the provisions of 40 CFR 60, must automatically check the zero (or low level value between zero and 20% of span value) and span (50 to 100% of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span must, as a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in Appendix B of 40 CFR 60. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified.

[40 CFR 60.13(d)]

5.17.3 Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under paragraph (d) of this section, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) In accordance with 40 CFR 60.13(e)(2), all continuous monitoring systems referenced by paragraph (c) of this section for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[40 CFR 60.13(e)]

5.17.4 All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used.

[40 CFR 60.13(f)]

5.17.5 Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to six-minute averages and for continuous monitoring systems other than opacity to one-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each six-minute period. For continuous monitoring systems other than opacity, one-hour averages shall be computed from four or more data points equally spaced over each one-hour period. Data recorded during periods of continuous system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. For owners and operators complying with the requirements in 40 CFR 60.7(f)(1) or (2), data averages must include any data recorded during periods of monitor breakdown or malfunction.

An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O_2 or ng of pollutant per J of heat input). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1% opacity).

[40 CFR 60.13(h)]

5.17.6 After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of 40 CFR 60 including, but not limited to the following:

(1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by 40 CFR 60 would not provide accurate measurements due to liquid water or other interferences caused by substances in the effluent gases

(2) Alternative monitoring requirements when the affected facility is infrequently operated.

(3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.

(4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.

(5) Alternative methods of converting pollutant concentration measurements to units of the standards.

(6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.

(7) Alternatives to the A.S.T.M. test methods or sampling procedures specified by any subpart.

(8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, Appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Administrator may require that such demonstration be performed for each affected facility.

(9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities is released to the atmosphere through more than one point.

[40 CFR 60.13(i)]

5.17.7 An alternative to the relative accuracy (RA) test specified in Performance Specification 2 of 40 CFR 60, Appendix B may requested as follows:

(1) An alternative to the reference method tests for determining RA is available for sources with emission rates demonstrated to be less than 50% of the applicable standard. A source owner or operator may petition the Administrator to waive the relative accuracy test in Section 8.4 of

Performance Specification 2 and substitute the procedures in Section 16.0 if the results of a performance test conducted according to the requirements in 40 CFR 60.8 or other tests performed following the criteria in 40 CFR 60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50% of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Administrator to waive the RA test and substitute the procedures in Section 16.0 of Performance Specification 2 if the control device exhaust emission rate is less than 50% of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the RA test shall include a detailed description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Administrator will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more stringent than in Performance Specification 2 (e.g., the application emission limit is more stringent that NSPS).

(2) The waiver of a CEMS RA test will be reviewed and may be rescinded at such time, following successful completion of the alternative RA procedure, that the CEMS data indicate that the source emissions are approaching the level. The criterion for reviewing the waiver is the collection of CEMS data showing that emissions have exceeded 70% of the applicable standard for seven, consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissions have exceeded 70% of the level needed to meet the control efficiency requirement for seven consecutive, averaging periods as specified by the applicable regulation(s) (e.g., 40 CFR 60.45(g)(2) and (3), 40 CFR 60.73(e), and 40 CFR 60.84(e)). It is the responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of RA testing. If this criterion is exceeded, the owner or operator must notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Administrator will review the notification and may rescind the waiver and require the owner or operator to conduct a RA test of the CEMS as specified in Section 8.4 of Performance Specification 2.

[40 CFR 60.13(j)]

Reporting

5.18 The owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by 40 CFR 60.7. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility,

(2) In accordance with 40 CFR 60.49b(a)(3), the annual capacity factor at which the owner or operator anticipates operating the facility based on all fuels fired and based on each individual fuel fired, and,

[40 CFR 60.49b(a)]

5.18.1 The owner or operator of each affected facility subject to sulfur dioxide, particulate matter, and/or nitrogen oxides emission limits under 40 CFR 60.42b, 40 CFR 60.43b, and 40 CFR 60.44b shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in Appendix B. The owner or operator of each affected facility described in 40 CFR 60.44b(j) or 40 CFR 60.44b(k) shall submit to the Administrator the maximum heat input capacity data from the demonstration of the maximum heat input capacity of the affected facility.

[40 CFR 60.49b(b)]

5.18.2 The owner or operator of each affected facility subject to the nitrogen oxides standard of 60.44b who seeks to demonstrate compliance with those standards through the monitoring of steam generating unit operating conditions under the provisions of 40 CFR 60.48b(g)(2) shall submit to the Administrator for approval a plan that identifies the operating conditions to be monitored under 40 CFR 60.48b(g)(2) and the records to be maintained under 40 CFR 60.49b(j). This plan shall be submitted to the Administrator for approval within 360 days of the initial startup of the affected facility. The plan shall:

(1) Identify the specific operating conditions to be monitored and the relationship between these operating conditions and nitrogen oxides emission rates (i.e., ng/J or lbs/million Btu heat input). Steam-generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/or tertiary air) and the level of excess air (i.e., flue gas oxygen level);

(2) Include the data and information which the owner or operator used to identify the relationship between nitrogen oxides emission rates and these operating conditions;

(3) Identify how these operating conditions, including steam generating unit load, will be monitored under 40 CFR 60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam-generating unit load, that will be maintained by the owner or operator under 40 CFR 60.49b(j). If the plan is approved, the owner or operator shall maintain records of predicted nitrogen oxide emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan.

[40 CFR 60.49b(c)]

5.18.3 The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for coal, distillate oil, residual oil, natural gas, wood, and municipal-type solid waste for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

[40 CFR 60.49b(a)-(d)]

5.19 The owner or operator of any affected facility in any category listed in Paragraphs (h)(1) or (2) of this section is required to submit excess emission reports for any excess emissions which occurred during the reporting period.

(1) Any affected facility subject to the opacity standards under 40 CFR 60.43b(e) or to the operating parameter monitoring requirements under 40 CFR 60.13(i)(1).

(2) Any affected facility that is subject to the nitrogen oxides standard of 40 CFR 60.44b;

(i) Combusts natural gas, distillate oil, or residual oil with a nitrogen content of 0.3 weight percent or less; or

(ii) Has a heat input capacity of 73 MW (250 million Btu/hour) or less, and is required to monitor nitrogen oxides emissions on a continuous basis under 40 CFR 60.48b(g)(1) or steam generating unit operating conditions under 40 CFR 60.48b(g)(2).

(3) Not applicable.

(4) For purposes of 40 CFR 60.48b(g)(1), excess emissions are defined as any calculated 30-day rolling average nitrogen oxides emission rate, as determined under 40 CFR 60.46b(e), which exceeds the applicable emission limits in 40 CFR 60.44b.

[40 CFR 60.49b(h)]

5.20 The owner or operator of any affected facility subject to the continuous monitoring requirements for nitrogen oxides under 40 CFR 60.48(b) shall submit reports containing the information recorded under paragraph (g) of this section.

[40 CFR 60.49b(i)]

5.21 Address

5.21.1 All requests, reports, applications, submittals, and other communications to the Administrator pursuant to 40 CFR 60 shall be submitted in duplicate to the appropriate Regional Office of the EPA to the attention of the Director of the Division indicated in the following list of EPA Regional Offices. Copies of all information required to be submitted to the EPA for applicable NSPS requirements, shall also be submitted to the Department at the address given in Section 1 of this permit.

Region 10
Director, Air and Waste Management Division
EPA
1200 Sixth Ave.
Seattle, WA 98101

[40 CFR 60.4(a); IDAPA 58.01.01.322.08]

5.22 Notification and Recordkeeping

Any owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:

(1) A notification of the date construction (or reconstruction as defined under 40 CFR 60.15 of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.

(2) (Reserved).

(3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

(5) A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with 40 CFR 60.13(c). Notification shall be postmarked not less than 30 days prior to such date.

(6) A notification of the anticipated date for conducting the opacity observations required by 40 CFR 60.11(e)(1) of 40 CFR 60. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.

(7) A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by 40 CFR 60.8 in lieu of Method 9 observation data as allowed by 40 CFR 60.11(e)(5) of 40 CFR 60. This notification shall be post-marked not less than 30 days prior to the date of the performance test.

[40 CFR 60.7(a)]

5.22.1 Any owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 CFR 60.7(b)]

5.22.2 Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and-or summary report form (see paragraph (d) of this section) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[40 CFR 60.7(c)]

5.22.3 The summary report form shall contain the information and be in the format shown in Figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

(1) If the total duration of excess emissions for the reporting period is less than 1% of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5% of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.

(2) If the total duration of excess emissions for the reporting period is 1% or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5% or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

Summary Report -- Gaseous and Opacity Excess Emission and Monitoring System Performance

Pollutant (Circle One: SO_2 / NO_x / TRS / H_2S / CO / Opacity)

Reporting period dates: From: _____ To: _____

Company: _____

Emission Limitation: _____

Address: _____

Monitor Manufacturer and Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period[1]: _____

Emission Data Summary[1]		CMS Performance Summary[1]	
1. Duration of excess emissions in reporting due to:		1. CMS downtime in reporting period period due to:	
a. Startup/shutdown	_____	a. Monitor equipment malfunctions	_____
b. Control equipment problems	_____	b. Non-Monitor equipment malfunctions	_____
c. Process problems	_____	c. Quality assurance calibration	_____
d. Other known causes	_____	d. Other known causes	_____
e. Unknown causes	_____	e. Unknown causes	_____
2. Total duration of excess emission	_____	2. Total CMS downtime	_____
3. Total duration of excess emissions x (100) [Total source operating time]	%[2]	3. [Total CMS Downtime] x (100) [Total source operating time]	%[2]

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1% or greater of the total operating time or the total CMS downtime is 5% or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted.

On a separate page, describe any changes since last quarter in CMS, process or controls. I certify that the information contained in this report is true, accurate, and complete.

_____
Name

_____
Signature

_____
Title

_____
Date

[40 CFR 60.7(d)]

5.22.4 (1) Notwithstanding the frequency of reporting requirements specified in paragraph (c) of this section, an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For one full year (e.g., four quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under 40 CFR 60 continually demonstrate that the facility is in compliance with the applicable standard;

(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60 Subpart A and the applicable standard; and

(iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in paragraph (e)(2) of this section.

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in paragraphs (e)(1) and (e)(2) of this section.

[40 CFR 60.7(e)]

5.22.5 Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows;

(1) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(2) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(3) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (f) of this section, if the Administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

[40 CFR 60.7(f)]

5.22.6 (g) If notification substantially similar to that in paragraph (a) of this section is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of Paragraph (a) of this section.

[40 CFR 60.7(g)]

5.22.7 (h) Individual subparts of 40 CFR 60 may include specific provisions which clarify or make inapplicable the provisions set forth in this section.

[40 CFR 60.7(h)]

PTC General Provisions

5.23 The permittee shall at all times (except as provided in the *Rules*) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[PTC No. 029-00003, General Provision B, 7/7/95]

5.24 The performance tests will be performed at the maximum production rate. If this maximum rate is not achieved during testing, the allowable production rate will be limited to the production rate attained during testing.

[PTC No. 029-00003, General Provision F, 7/7/95]

6. WET PROCESS PHOSPHORIC ACID PLANT

Summary Description

The following is a narrative description of the phosphoric acid plant regulated in this Tier I operating permit. This description is for informational purposes only.

Phosphate rock is fed, along with water, sulfuric acid, and recycle acid, into a series of seven cells: the first five being "reactors" and the last two being "digesters". Here it is mixed together and circulated while a chemical reaction takes place forming a slurry of phosphoric acid (approximately 30% P_2O_5) and crystals of calcium sulfate known as phosphogypsum. The slurry is fed to a pair of circular pan filters where the 30% acid is separated from the gypsum. The phosphogypsum is slurried to an impoundment, commonly referred to as a "gyp stack." The 30% acid is sometimes sold at that concentration to other suppliers and users. However, most of the acid is concentrated using a series of eight evaporators which use steam heaters and vacuum systems with condensers to remove some of the water. This acid is stored in tanks and some of it is sold as Merchant Grade Acid. Some of it is further upgraded to super phosphoric acid (70% P_2O_5) using special evaporators with natural gas-fired Therminol heaters to provide the necessary high temperature needed and is then stored in other tanks. The super phosphoric acid is further upgraded by removing impurities using three filters before it is loaded on trucks and railcars. Some of the intermediate grades of fertilizer are pumped to the granulation plant for use in dry granulated fertilizer production.

The purified phosphoric acid (PPA) process converts green acid (27% P_2O_5) produced by the phosphoric acid plant to food-grade PPA (61% P_2O_5) with a solvent extraction process. The PPA plant is not subject to the MACT requirements because it does use methyl isobutyl ketone (MIBK) as a solvent in the process.

Table 6.1 describes the devices used to control emissions from the wet process phosphoric acid plant.

Table 6.1 EMISSIONS UNITS AND EMISSIONS CONTROL DEVICES

Source Code	Emission Unit(s) / Process(es)	Emission Control Device
S-Pa-1	Phosphoric acid process	Multi-stage horizontal cross-flow scrubber (A-Pa-1)
S-Pb-1	Superphosphoric acid process	Multi-stage horizontal cross-flow scrubber (A-Pb-1)
S-Pp-1	Purified phosphoric acid process	Sulfiding vent scrubber (A-Pp-1) (TAG. No. CP-4535101) Filter aid silo baghouse (A-Pp-2) (TAG. No. CP-5136101) Conditioning vent scrubber (A-Pp-3) (TAG. No. CP-4536101)
S-Pa-2a and 2b	Thermal fluid heaters	S-Pa-2a is equipped to control O_2 in combustion air

Table 6.2 contains only a summary of the requirements that apply to the phosphoric acid plant. Specific permit requirements are listed below Table 6.2.

Table 6.2 APPLCIABLE REQUIREMENTS SUMMARY[1]

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Monitoring and Recordkeeping Requirements
6.1	Fluoride emissions from wet process phosphoric acid line	6.750 gram / metric ton of equivalent P_2O_5 feed (0.01350 lb/ton)	40 CFR 63.603(a) [(2)]	6.6, 6.8, 6.9, 6.10, 6.11, 6.12, 6.13, 6.14, 6.17, 6.18, 6.19, 6.20, 6.23, 6.27, 6.28, 6.29, 6.30, 6.31, 6.32, 6.33
6.2	Fluoride emissions from superphosphoric acid process line	4.350 gram/metric ton of equivalent P_2O_5 feed (0.00870 lb/ton)	40 CFR 63.603(b) [(2)]	6.6, 6.10, 6.11, 6.12, 6.13, 6.14, 6.17, 6.18, 6.19, 6.20, 6.23, 6.27, 6.28, 6.29, 6.30, 6.32, 6.33
6.3	Nitrogen oxide emissions from superphosphoric acid process line	0.045 pounds per ton of equivalent P_2O_5 feed, and five tons per year	PTC No. 029-00003, Permit Condition 1.3, pg. 7, 7/12/00	6.7, 6.21
6.4	Radon -222	20 pCi/(m^2-sec)	40 CFR 61.202	6.24, 6.25
6.5	Particulate matter	Process Weight Limitations	IDAPA 58.01.01.701	6.10, 6.26
6.6	Emission from PPA process	Solvent emissions	PTC No. 029-00003	6.9, 6.15, 6.16, 6.22

[1] As determined by a pollutant-specific EPA reference method, Department apporved alternative, or as determined by DEQ's emissions estimation methods used in the PTC application analysis.

[2] If any requirement in this permit conflicts with any requirement contained in 40 CFR 63, the requirement in 40 CFR 63 shall control.

Permit Limits / Standard Summary

6.1 Fluoride - Wet Process Phosphoric Acid Process Line Requirement

On and after the date on which the performance test required to be conducted by 40 CFR 63.7 and 63.606 is required to be completed, no owner or operator subject to the provisions of 40 CFR 63, Subpart AA shall cause to be discharged into the atmosphere from any affected source any gases which contain total fluorides in excess of 6.750 gram/metric ton of equivalent P_2O_5 feed (0.01350 lb/ton). 40 CFR 63.601 defines a wet process phosphoric acid process line as any process line manufacturing phosphoric acid by reacting phosphate rock and acid.

[40 CFR 63.603(a); PTC No. 029-00003, Permit Condition 1.1, pg. 7, 7/12/00]

6.2 Fluoride - Superphosphoric Acid Process Line Requirement

On and after the date on which the performance test required to be conducted by 40 CFR 63.7 and 63.606 is required to be completed, no owner or operator subject to the provisions of 40 CFR 63, Subpart AA shall cause to be discharged into the atmosphere from any affected source any gases which contain total fluorides in excess of 4.350 gram/metric ton of equivalent P_2O_5 feed (0.00870 lb/ton). As required by 40 CFR 63.601 defines a superphosphoric acid process line as *"any process line which concentrates wet-process phosphoric acid to 66% or greater P_2O_5 by weight."*

[40 CFR 63.603(b); PTC No. 029-00003, Permit Condition 1.2, pg. 7, 7/12/00]

6.3 NO_x - Superphosphoric Acid Oxidation Process

Emissions of NO_x from the Superphosphoric Acid Oxidation Process shall not exceed 0.045 pounds per ton of equivalent P_2O_5 feed (0.045 lb/ton). Emissions of oxides of nitrogen from the Superphosphoric Acid Oxidation Process shall not exceed five tons per year.

[IDAPA 58.01.01.211.01, 5/1/94; PTC No. 029-00003, Permit Condition 1.3, pg. 7, 7/12/00]

6.4 Radon - Phosphogypsum Stack

Each person who generates phosphogypsum shall place all phosphogypsum in stacks. Phosphogypsum may be removed from a phosphogypsum stack only as expressly provided by 40 CFR 61, Subpart R. After a phosphogypsum stack has become an inactive stack, the owner or operator shall assure that the stack does not emit more than 20 pCi/(m^2-sec) (1.9 pCi/(ft^2-sec)) of radon-222 into the air.

[40 CFR 61.202]

6.5 PM - Process Weight PM Emissions Limitations

No person shall emit into the atmosphere from any process or process equipment commencing operation on or after October 1, 1979, particulate matter in excess of the amount shown by the following equations, where *E* is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour.

a. If PW is less than 9,250 lb/hr,

$$E = 0.045(Pw)^{0.6}$$

b. If PW is equal to or greater than 9,250 lb/hr,

$$E = 1.10(PW)^{0.25}$$

[IDAPA 58.01.01.701, 4/5/00]

Operating Requirements

6.6 Pressure Drops and Flow Rates for Wet Scrubbers

On or after the date on which the performance test required to be conducted by 40 CFR 63.7 and 63.606 is completed, the owner/operator using a wet scrubbing emission control system must maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant to the requirements of 40 CFR 63.605(d)(1) or (2).

[40 CFR 63.604; PTC No. 029-00003, Permit Condition 2.1, pg. 7, 7/12/00]

6.7 P_2O_5 Throughput - Superphosphoric Acid Oxidation Process

The equivalent P_2O_5 feed to the Superphosphoric Acid Process Line shall not exceed 225,000 T/yr per any consecutive 12-month period.

[IDAPA 58.01.01.211.01, 5/1/94; PTC No. 029-00003, Permit Condition 2.2, pg. 7, 7/12/00]

6.8 Evaporative Cooling Tower

No owner or operator shall introduce into any evaporative cooling tower any liquid effluent from any wet scrubbing device installed to control emissions from process equipment.

[40 CFR 63.603(e); PTC No. 029-00003, Permit Condition 2.1, 7/12/00]

6.9 Solvent Usage in PPA Process

The owner or operator shall not use methyl isobutyl ketone (MIBK), or any HAP as defined in Section 112 of the Clean Air Act, as a solvent in the PPA process unless the owner or operator complies with the requirements in 40 CFR 63.603(f) and 40 CFR 63, Subpart H.

[40 CFR 63.603(e); PTC No. 029-00003, Permit Condition 2.1, 7/12/00]

Monitoring & Recordkeeping Requirements

6.10 Throughput Monitoring Systems

Each owner or operator of a new or existing wet-Process Phosphoric Acid Process Line, Superphosphoric Acid Process Line subject to the provisions of 40 CFR 63, Subpart AA shall install, calibrate, maintain, and operate a monitoring system which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ± 5% over its operating range.

[40 CFR 63.605(a); PTC No. 029-00003, Permit Condition 3.1, pg. 8, 7/12/00]

6.11 P_2O_5 Throughput

Each owner or operator of a new or existing wet-Process Phosphoric Acid Process Line or Superphosphoric Acid Process Line subject to the provisions of 40 CFR 63, Subpart AA shall maintain a daily record of equivalent P_2O_5 feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of 6.10 (40 CFR 63.605(a)) and then proceeding according to 40 CFR 63.606(c)(3) (Permit Condition 6.20.1(3)).

[40 CFR 63.605(b)(1); PTC No. 029-00003, Permit Condition 3.2, pg. 8, 7/12/00]

6.12 Pressure Drop Across Each Scrubber

Each owner or operator of a new or existing Wet-Process Phosphoric Acid Process Line, Superphosphoric Acid Process Line using a wet scrubbing emission control system shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5% over its operating range.

[40 CFR 63.605(c)(1); PTC No. 029-00003, Permit Condition 3.3, pg. 8, 7/12/00]

6.13 Liquid Flow Rate of Each Scrubber

Each owner or operator of a new or existing Wet-Process Phosphoric Acid Process Line, Superphosphoric Acid Process Line using a wet scrubbing emission control system shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5% over its operating range.

[40 CFR 63.605(c)(2); PTC No. 029-00003, Permit Condition 3.4, pg. 8, 7/12/00]

6.14 Scrubber Pressure Drop and Liquid Flow Rate Ranges

Following the date on which the performance test required in 40 CFR 63.606 is completed, the owner or operator of a new or existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in 40 CFR 63, Subpart AA must establish allowable ranges for operating parameters using the methodology specified in either (1) or (2) of this section:

(1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ±20% of the baseline average value determined as a requirement of 40 CFR 63.606(c)(4), (d)(4), or (e)(2). The Administrator retains the right to reduce the ±20% adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard, but, in no instance shall the adjustment be reduced to less than ±10%. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, the owner or operator shall determine whether new allowable ranges of baseline average values will be based upon the new performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retested and the performance test results are submitted to the Administrator pursuant to 40 CFR 63.607(c)(1), 63.7(g)(1), and/or 63.10(d)(2), the owner or operator will indicate whether the operating range will be based on the new performance test or the previously established range. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

(2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges for the daily averages of the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with 40 CFR 63 Subpart AA. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in 40 CFR 63.606(c)(4), (d)(4), or (e)(2). As an alternative, the owner or operator can establish the allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in 40 CFR 63, Subpart AA and established in the manner required in 40 CFR 63.606(c)(4), (d)(4), or (e)(2). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the

allowable ranges. When a source using the methodology of this paragraph is retested, the owner or operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters outside the previously established ranges. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

[40 CFR 63.605(d); PTC No. 029-00003, Permit Condition 3.5, pg. 9, 7/12/00]

6.15 Sulfiding Vent Scrubber (A-Pp-1) Pressure Drop and Liquid Flow Rate

6.15.1 The permittee shall install, calibrate, maintain, and operate, in accordance with manufacturer specifications, equipment to continuously measure the pressure differential across the scrubber and the scrubbing media flowrate to the scrubber.

6.15.2 The pressure drop across the scrubber and the scrubbing media flowrate to the scrubber shall be maintained within the manufacturer and O&M manual specifications when it is operated. Documentation of both the manufacturer and O&M manual operating pressure drop and scrubbing media flowrate specifications shall remain onsite at all times and shall be available to the Department representatives upon request.

6.15.3 The permittee shall monitor and record the pressure drop across the scrubber and the scrubbing media flowrate to the scrubber on a daily basis when it is operated. A compilation of the most recent five years of records shall be kept onsite and shall be made available to the Department representatives upon request.

[IDAPA 58.01.01.211.01, 5/1/94; PTC No. 029-00003, Permit Condition 3.6, pg. 9, 7/12/00]

6.16 Filter Aid Silo Baghouse Pressure Drop

6.16.1 The permittee shall install, calibrate, maintain, and operate, in accordance with manufacturer specifications, equipment to continuously measure the pressure differential across the baghouse.

6.16.2 The pressure drop across the baghouse shall be maintained within the manufacturer and O&M manual specifications when it is operated. Documentation of both the manufacturer and O&M manual operating pressure drop specifications shall remain onsite at all times and shall be available to the Department representatives upon request.

6.16.3 The permittee shall monitor and record the pressure drop across the baghouse on a weekly basis when it is operated. A compilation of the most recent five years of records shall be kept onsite and shall be made available to the Department representatives upon request.

[IDAPA 58.01.01.211.01, 5/1/94; PTC No. 029-00003, Permit Condition 3.7, pg. 9, 7/12/00]

6.17 Performance Testing for Existing Units

On or before the applicable compliance date in 40 CFR 63.609 and once per annum thereafter, each owner or operator of a phosphoric acid manufacturing plant shall conduct a performance test to demonstrate compliance with the applicable emission standard for each existing Wet-Process Phosphoric Acid Process Line, Superphosphoric Acid Process Line. The owner or operator shall conduct the performance test according to the procedures in 40 CFR 63, Subpart A and in 40 CFR 63.606.

[40 CFR 63.606(a)(1); PTC No. 029-00003, Permit Condition 3.8, pg. 10, 7/12/00]

6.18 Performance Testing for New Units

As required by 40 CFR 63.7(a)(2) and once per annum thereafter, each owner or operator of a phosphoric acid manufacturing plant shall conduct a performance test to demonstrate compliance with the applicable emission standard for each new Wet-Process Phosphoric Acid Process Line, Superphosphoric Acid Process Line. The owner or operator shall conduct the performance test according to the procedures in 40 CFR 63, Subpart A and in 40 CFR 63.606.

[40 CFR 63.606(a)(2); PTC No. 029-00003, Permit Condition 3.9, pg. 10, 7/12/00]

6.19 Performance Test Methods

In conducting performance tests, each owner or operator of an affected source shall use as reference methods and procedures the test methods in 40 CFR 60, Appendix A, or other methods and procedures as specified in 40 CFR 63.606, except as provided in 40 CFR 63.7(f).

[40 CFR 63.606(b); PTC No. 029-00003, Permit Condition 3.10, pg. 10, 7/12/00]

6.20 Performance Testing - Fluorides

Each owner or operator of a new Wet-Process Phosphoric Acid Process Line or Superphosphoric Acid Process Line shall determine compliance with the applicable total fluorides standards in 40 CFR 63.603, as specified in 6.1 and 6.2.

6.20.1 (1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^{N} C_{si} Q_{sdi} \right) \Big/ (PK)$$

Where:

E = emission rate of total fluorides, g/metric ton (lb/ton) of equivalent P_2O_5 feed.
C_{si} = concentration of total fluorides from emission point "i," mg/dscm (mg/dscf).
Q_{sdi} = volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).
N = number of emission points associated with the affected facility.
P = equivalent P_2O_5 feed rate, metric ton/hr (ton/hr).
K = conversion factor, 1000 mg/g (453,600 mg/lb).

(2) Method 13A or 13B (40 CFR 60, Appendix A) shall be used to determine the total fluorides concentration (C_{si}) and volumetric flow rate (Q_{sdi}) of the effluent gas from each of the emission points. If Method 13B is used, the fusion of the filtered material described in Section 7.3.1.2 and the distillation of suitable aliquots of containers 1 and 2, described in section 7.3.3 and 7.3.4 in Method 13 A, may be omitted. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The equivalent P_2O_5 feed rate (P) shall be computed using the following equation:

$$P = M_p R_p$$

Where:

M_p = total mass flow rate of phosphorus-bearing feed, metric ton/hr (ton/hr).
R_p = P_2O_5 content, decimal fraction.

(i) The accountability system described in 40 CFR 63.605(a) and (b) shall be used to determine the mass flow rate (M_p) of the phosphorus-bearing feed.

(ii) The P_2O_5 content (R_p) of the feed shall be determined using as appropriate the following methods (incorporated by reference -- see 40 CFR 63.14) specified in the Book of Methods Used and Adopted By The Association Of Florida Phosphate Chemists, Seventh Edition 1991, where applicable:

(A) Section IX, Methods of Analysis for Phosphate Rock, No. 1 Preparation of Sample.

(B) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus - P_2O_5 or $Ca_3(PO_4)_2$, Method A - Volumetric Method.

(C) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus - P_2O_5 or $Ca_3(PO_4)_2$, Method B Gravimetric Quimociac Method.

(D) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus - P_2O_5 or $Ca_3(PO_4)_2$, Method C - Spectrophotometric Method.

(E) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5, Method A-Volumetric Method.

(F) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5, Method B-Gravimetric Quimociac Method.

(G) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5, Method C-Spectrophotometric Method.

(4) To comply with 40 CFR 63.605(d)(1) or (2), the owner or operator shall use the monitoring systems in 40 CFR 63.605(c) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the total fluoride runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of 40 CFR 63.605(d)(1) or (2).

[40 CFR 63.606(c); PTC No. 029-00003, Permit Condition 3.11, pg. 10, 7/12/00]

6.21 <u>NO_x Performance Test - Superphosphoric Acid Oxidation Process</u>

The owner or operator shall conduct a performance test to measure NO_x emissions from the Superphosphoric Acid Oxidation Process stack within 60 days after achieving the maximum production rate at which the source will operate, but not later than 180 days after initial start-up. This initial performance test, and any subsequent performance tests conducted to demonstrate compliance with Permit Condition 6.3 shall be performed in accordance with IDAPA 58.01.01.157, Permit Condition 6.35 and the following requirements:

6.21.1 The equivalent P_2O_5 feed to the Superphosphoric Acid Process Line in tons per hour (T/hr) shall be recorded during each performance test.

6.21.2 If the NO_x measured in the performance tests is less than or equal to 75% of the permitted NO_x emission limits in this permit, no further testing shall be required. If the NO_x measured during the performance tests is greater than 75%, but less than or equal to 90% of the permitted NO_x emission limits in this permit, a test shall be required every three years after issuance of this permit. If the NO_x measured during the performance tests is greater than 90% of the permitted NO_x emission limits in this permit, the permittee shall conduct a performance test annually.

[IDAPA 58.01.01.211.01, 5/1/94; PTC No. 029-00003, Permit Condition 3.12, pg. 10, 7/12/00]

6.22 Operations and Maintenance Manual Requirements

Within 60 days after startup, the permittee shall have developed an O&M manual for the sulfiding vent scrubber and the filter aid silo baghouse, which describes the procedures that will be followed to comply with Permit Condition 6.34 and the air pollution control device requirements contained in this permit. The manual shall remain onsite at all times and shall be available to Department representatives upon request.

[IDAPA 58.01.01.211.01, 5/1/94; PTC No. 029-00003, Permit Condition 3.13, pg. 11, 7/12/00]

6.23 Each owner or operator subject to the requirements of 40 CFR 63, Subpart AA shall comply with the recordkeeping requirements in 40 CFR 63.10. Requirements are included in Appendix A of this permit.

[40 CFR 63.607(b)]

6.24 Radon Monitoring from Phosphogypsum Stacks

(a) Within 60 days following the date on which a stack becomes an inactive stack, or within 90 days after the date on which 40 CFR 61, Subpart R first took effect if a stack was already inactive on that date, each owner or operator of an inactive phosphogypsum stack shall test the stack for radon-222 flux in accordance with the procedures described in 40 CFR 61, Appendix B, Method 115. EPA shall be notified at least 30 days prior to each such emissions test so that EPA may, at its option, observe the test. If meteorological conditions are such that a test cannot be properly conducted, then the owner or operator shall notify EPA and test as soon as conditions permit.

(b) (i) Within 90 days after the testing is required, the owner or operator shall provide EPA with a report detailing the actions taken and the results of the radon-222 flux testing. Each report shall also include the following information:

(1) The name and location of the facility;

(ii) A list of the stacks at the facility including the size and dimensions of each stack;

(iii) The name of the person responsible for the operation of the facility and the name of the person preparing the report (if different);

(iv) A description of the control measures taken to decrease the radon flux from the source and any actions taken to insure the long te rm effectiveness of the control measures; and

(v) The results of the testing conducted, including the results of each measurement.

(2) Each report shall be signed and dated by a corporate officer in charge of the facility and contain the following declaration immediately above the signature line: "I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on may inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment. See, 18 U.S.C. 1001."

(c) If the owner or operator of an inactive stack chooses to conduct measurements over a one year period as permitted by Method 115 in Appendix B to Part 61, within 90 days after the testing commences the owner or operator shall provide EPA with an initial report, including the results of the first measurement period and a schedule for all subsequent measurements. An additional report containing all the information in 40 CFR 61.203(b) shall be submitted within 90 days after completion of the final measurements.

(d) If at any point an owner or operator of a stack once again uses an inactive stack for the disposal of phosphogypsum or for water management, the stack ceases to be in inactive status and the owner or operator must notify EPA in writing within 45 days. When the owner or operator ceases to use the stack for disposal of phosphogypsum or water management, the stack will once again become inactive and the owner or operator must satisfy again all testing and reporting requirements for inactive stacks.

(e) If an owner or operator removes phosphogypsum from an inactive stack, the owner shall test the stack in accordance with the procedures described in 40 CFR 61, Appendix B, Method 115. The stack shall be tested within ninety days of the date that the owner or operator first removes phosphogypsum from the stack, and the test shall be repeated at least once during each calendar year that the owner or operator removes additional phosphogypsum from the stack. EPA shall be notified at least 30 days prior to an emissions test so that EPA may, at its option, observe the test. If meteorological conditions are such that a test cannot be properly conducted, then the owner shall notify EPA and test as soon as conditions permit. Within 90 days after completion of a test, the owner or operator shall provide EPA with a report detailing the actions taken and the results of the radon-222 flux testing. Each such report shall include all of the information specified by 40 CFR Part 61.203(b).

[40 CFR 63.203]

6.25 Recordkeeping for Phosphogypsum Stacks

Each owner or operator of a phosphogypsum stack must maintain records for each stack documenting the procedure used to verify compliance with the flux standard in 40 CFR 61.202, including all measurements, calculations, and analytical methods on which input parameters were based. The required documentation shall be sufficient to allow an independent auditor to verify the correctness of the determination made concerning compliance of the stack with flux standard.

[40 CFR 63.209]

6.26 Performance Test - Particulate Matter

The permittee shall conduct a compliance test on S-Pa-1, S-Pb-1, S-Pp-1, and S-Pa-2a and 2b in accordance with the procedures outlined in 40 CFR 60, Appendix A, Method 5, or a Department-approved alternative method, within 180 days of issuance of the permit. If the particulate matter emission rate measured in the initial compliance test is less than or equal to 75% of the emission standard in Permit Condition 6.5, no further testing shall be required during the permit term. The process weight

measured during the compliance test shall be PW in the equation. If the particulate matter emission rate measured during the compliance test is greater than 75%, but less than or equal to 90%, of the emission standard in Permit Condition 6.5, a second test shall be required in the third year of the permit term. If the particulate matter emission rate measured during the compliance test is greater than 90% of the emission standard in Permit Condition 6.5, the permittee shall conduct a compliance test annually.

[IDAPA 58.01.01.322.09, 5/1/94]

Reporting

6.27 MACT Performance Test Report

In accordance with 40 CFR 63.607(c), the owner or operator of an affected source shall comply with the reporting requirements specified in 40 CFR 63.10 as follows:

6.27.1 Performance Test Report

As required by 40 CFR 63.10, the owner or operator shall report the results of the initial and annual performance tests as part of the notification of compliance status required in 40 CFR 63.9.

[40 CFR 63.607(c)(1)]

6.27.2 Excess Emissions Report

As required by 40 CFR 63.10, the owner or operator of an affected source shall submit an excess emissions report for any exceedance of an operating parameter limit. The report shall contain the information specified in 40 CFR 63.10. When no exceedances of an operating parameter have occurred, such information shall be included in the report. The report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the owner or operator shall report quarterly until a request to reduce reporting frequency is approved, as described in 40 CFR 63.10.

[40 CFR 63.607(c)(2)]

6.27.3 Summary Report

If the total duration of control system exceedances for the reporting period is less than 1% of the total operating time for the reporting period, the owner or operator shall submit a summary report containing the information specified in 40 CFR 63.10, rather than the full excess emissions report, unless required by the Administrator. The summary report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half.

[40 CFR 63.607(c)(3)]

6.27.4 If the total duration of control system operating parameter exceedances for the reporting period is 1% or greater of the total operating time for the reporting period, the owner or operator shall submit a summary report and excess emissions report.

[40 CFR 63.607(c)(4); PTC No. 029-00003, Permit Condition 4.1, pg. 11, 7/12/00]

6.28 Each owner or operator subject to the requirements of 40 CFR 63, Subpart AA shall comply with the notification requirements in 40 CFR 63.9. Requirements are included in Appendix A of this permit.

[40 CFR 63.607(a); 40 CFR 63.627(a)]

Phosphoric Acid Manufacturing Plant MACT Compliance Dates

6.29 Each owner or operator of an existing affected source at a phosphoric acid manufacturing plant shall achieve compliance with the requirements of 40 CFR 63, Subpart AA no later than June 10, 2002. Notwithstanding the requirements of 40 CFR 63.7(a)(2)(iii), each owner or operator of an existing source at an affected existing phosphoric acid manufacturing plant shall fulfill the applicable requirements of 40 CFR 63.606 no later than June 10, 2002.

[40 CFR 63.609(a)]

6.30 Each owner or operator of a phosphoric acid manufacturing plant that commences construction or reconstruction of an affected source after December 27, 1996 shall achieve compliance with the requirements of 40 CFR 63, Subpart AA upon startup of operations or by June 10, 1999, whichever is later.

[40 CFR 63.609(b)]

Evaporative Cooling Tower Certification Requirements

6.31 Each owner or operator of an affected source subject to the evaporative cooling tower requirements in 6.8 (40 CFR 63.603(e)) must certify to the Administrator annually that he/she has complied with the requirements contained in that section.

[40 CFR 63.603(e)]

Phosphoric Acid Manufacturing Plant Exemption From New Source Performance Standards

6.32 Any affected source subject to the provisions of 40 CFR 63, Subpart AA is exempted from any otherwise applicable new source performance standard contained in 40 CFR 60, Subpart T, Subpart U, or Subpart NN. To be exempt, a source must have a current operating permit pursuant to Title V of the Act and the source must be in compliance with all requirements of 40 CFR 63, Subpart AA. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of 40 CFR 63.604, 63.605 and 63.606 have been met.

[40 CFR 63.610]

Applicability of MACT General Provisions

6.33 The owner or operator shall comply with the requirements of the general provisions in 40 CFR 63, Subpart A as shown in Appendix A to 40 CFR 63, Subpart AA. Requirements are included in Appendix A of this permit.

[40 CFR 63.608; PTC No. 029-00003, Permit Condition 2.2, 7/12/00]

PTC General Provisions

6.34 The permittee shall at all times (except as provided in the *Rules*) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[PTC No. 029-00003, General Provision B, 7/12/00]

6.35 The maximum allowable operating rate shall be limited to 120% of the average operating rate attained during any performance test period, for which a test protocol has been granted prior approval by the Department, unless (1) the test demonstrates noncompliance; (2) a more restrictive operating limit is specified elsewhere in this permit; or (3) at such an operating rate, emissions would exceed any emissions limit(s) set forth in this permit.

[PTC No. 029-00003, General Provision F, 7/12/00]

7. EXPERIMENTAL SILICA PLANT

Summary Description

The following is a narrative description of the experimental silica plant regulated in this Tier I operating permit. This description is for informational purposes only.

An incoming fluoride solution is ammoniated to excess (pH 8.3) resulting in weak (approximately 1.5%) ammonium hydroxide solution. Fugitive emissions resulting from the process are controlled by a fume containment system. The slurry from the process is dewatered and solids are saved as high purity silica. The liquids are concentrated and used as ammoniated phosphate feed solution to the Granulation plant.

Two scrubbers control the process, one for removing ammonia and the second one for removing fluoride. The ammonia scrubber uses 38% phosphoric acid as a scrubbing media. The fluoride scrubber uses water to remove fluoride in a venturi scrubber.

Table 7.1 describes the devices used to control emissions from the experimental silica plant.

Table 7.1 EMISSIONS UNITS AND EMISSIONS CONTROL DEVICES

Source Code	Emission Unit(s) / Process(es)	Emission Control Device
S-Si-1	Experimental silica plant	Venturi scrubber (A-Si-1a) phosphoric acid Venturi scrubber (A-Si-1b) water

Table 7.2 contains only a summary of the requirements that apply to the experimental silica plant. Specific permit requirements are listed below Table 7.2.

Table 7.2 APPLICABLE REQUIREMENTS SUMMARY

Permit Conditions	Parameter	Permit Limit / Standard Summary	Applicable Requirements Reference	Monitoring & Recordkeeping Requirements
7.1	Ammonia emissions	0.00066 lb/hr 0.0028 T/yr	PTC No. 0027-00003, Permit Condition 2.1	7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.10
7.1	Fluoride emissions	0.011 lb/hr 0.046 T/yr	PTC No. 0027-00003, Permit Condition 2.1	7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.10
7.2	Particulate matter	Process weight limitations	IDAPA 58.01.01.701	7.8, 7.9

Permit Limits / Standard Summary

7.1 Ammonia and fluoride emissions shall not exceed the pound-per-hour and ton-per-year limits in Table 7.3.

Table 7.3 PERMIT LIMITS

Emission Unit	Ammonia Emissions[1]		Fluoride Emissions[1]	
	lb/hr	T/yr[2]	lb/hr	T/yr[2]
Experimental Silica Plant	0.00066	0.0028	0.011	0.046

[1] As determined by design calculations provided by the company and verified during the permit analysis.
[2] As determined by multiplying the actual or allowable (if actual is not available) pound per hour emission rate by the allowable hours per year that the process may operate.

7.2 No person shall emit into the atmosphere from any process or process equipment commencing operation on or after October 1, 1979, PM in excess of the amount shown by the following equations, where E is the allowable emission from the entire source in pounds per hour, and PW is the process weight in pounds per hour.

a. If PW is less than 9,250 lb/hr,

$$E = 0.045(PW)^{0.6}$$

b. If PW is equal to or greater than 9,250 lb/hr,

$$E = 1.10(PW)^{0.25}$$

[IDAPA 58.01.01.701, 4/5/00]

Operating Requirements

7.3 Maintenance to the scrubbers shall be performed if visible emissions from the scrubber stack exceed 10% opacity for three minutes in any 60-minute period as determined in Permit Condition 1.8.

[PTC No. 0027-0003, Permit Condition 3.1, 8/7/92]

7.4 The permittee shall develop a routine maintenance schedule for the scrubbers to assure the Department that the air pollution control equipment will be operated optimally.

[PTC No. 0027-0003, Permit Condition 3.2, 8/7/92]

7.5 The production of silica is limited to 1,000 tons per year.

[PTC No. 0027-0003, Permit Condition 3.3, 8/7/92]

Monitoring & Recordkeeping Requirements

7.6 The permittee shall install pressure monitoring devices to continuously monitor pressure drop across the scrubbers. The pressure drop monitoring equipment shall be calibrated and maintained annually. The pressure drop shall be recorded daily.

[PTC No. 0027-0003, Permit Condition 4.1, 8/7/92]

7.7 The permittee shall install, calibrate, maintain and operate a flow rate device to continuously measure the scrubbing liquid volumetric flow rate. The monitoring device must be certified by the manufacturer to be accurate within ±5% of the measured value and must be calibrated on at least an annual basis in accordance with manufacturer instructions.

7.8 The permittee shall maintain records of the following information onsite and the records shall be made available to Department personnel for inspection upon request:

7.8.1 The flow rate and pressure drop across each of the scrubbers, recorded once per week.

7.8.2 A maintenance report stating the corrective actions taken when the scrubbers' stack exceeds 10% opacity as required in Permit Condition 7.3.

[PTC No. 0027-0003, Permit Condition 5.3, 8/7/92]

7.9 The permittee shall conduct a compliance test on S-Si-1 in accordance with the procedures outlined in 40 CFR 60, Appendix A, Method 5, or a Department-approved alternative method, within 180 days of issuance of the permit.

If the PM emission rate measured in the initial compliance test is less than or equal to 75% of the emission standard in Permit Condition 7.2, no further testing shall be required during the permit term. The process weight measured during the compliance test shall be PW in the equation. If the particulate matter emission rate measured during the compliance test is greater than 75%, but less than or equal to 90%, of the emission standard in Permit Condition 7.2, a second test shall be required in the third year of the permit term. If the particulate matter emission rate measured during the compliance test is greater than 90% of the emission standard in Permit Condition 7.2, the permittee shall conduct a compliance test annually.

[IDAPA 58.01.01.322.09, 5/1/94]

Reporting

7.10 The permittee shall submit to the Department a scrubber maintenance plan and schedule prior to commencing operation.

[PTC No. 0027-0003, Permit Condition 5.2, 8/7/92]

PTC General Provisions

7.11 The permittee shall at all times (except as provided in the *Rules*) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[PTC No. 029-00003, General Provision B, 8/7/92]

7.12 The performance tests will be performed at the maximum production rate. If the maximum rate is not achieved during testing, the allowable production rate will be limited to the production rate attained during testing.

[PTC No. 029-00003, General Provision F, 8/7/92]